



Summer Semester													
Direct (contact) education		21			60								
Online learning (synchronous)													
Online learning (asynchronous)													
TOTAL per year:													
Direct (contact) education		31,5			90								
Online learning (synchronous)													
Online learning (asynchronous)		10,5			30								
Educational objectives (max. 6 items) G 1. To familiarize students with the basic and specialized knowledge in the diagnosis and treatment of oral cavity diseases in children and adolescents. G 2. Preparing students to perform individual caries risk assessment, establishing the treatment plan and recommendations for the young patient. G 3. Preparing students to perform restorative treatment of carious and non-carious hard dental tissues lesions as well as endodontic treatment of patients in the developmental age. G 4. Preparing students for active participation in oral health promotion and formulation of preventive programmes. G 5. Preparing students for diagnosing and treatment of dental developmental disturbances as well as diagnosing and treatment of dental traumatic injuries in children and adolescents. G 6. Preparing students for management of dental anxiety and fear of a patient in developmental age													
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class													
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to				Methods of verification of intended education results (forming and summarising)				Form of didactic class <i>**enter the abbreviation</i>			
W01	F.W.1	To describe teeth development and morphology of teeth, periodontal tissues and mucosa				Oral response (F), Test (S)				SE, CC			
W02	F.W.3	To explain the principles of preventive-treatment procedures of oral diseases in different stages of individual development				Oral response (F)				L, SE, CC			
W03	F.W.7	To define the principles of management of carious and non-carious hard dental tissues lesions				Oral response (F), Test (S)				L, SE, CC			



W04	F.W.7	To describe the principles of management in dental traumatic injuries	Oral response (F), Test (S)	SE, CC
W05	F.W.8	knows the principles of management in pulp diseases and periapical diseases	Oral response (F), Test (S)	L, SE, CC
W06	F.W.13	To define indications and contraindication for esthetic dentistry procedures	Oral response (F), Test (S)	L, SE, CC
W07	F.W.14	To describe and understand the relationships between oral health status and systemic diseases	Oral response (F), Test (S)	SE, CC
U01	F.U01.	to perform and gather medical and dental history from the patient or the patient`s parents	Clinical assessment, observation	SE, CC
U02	F.U02.	To perform clinical examination of the young patient and interpret the data	Clinical assessment, observation	L, SE, CC
U03	F.U03.	To be able to explain the patient`s ailments to set the optimal method of treatment confirmed by a conscious consent	Clinical assessment, observation	CC
U04	F.U07.	To be able to present indications and contraindication for dentistry procedures	Clinical assessment, observation	CC
U05	F.U08.	To solve the problem of disease risk assessment and select of the optimal methods of oral disease prevention	Clinical assessment, observation	SE, CC
U06	F.U10.	To perform treatment of dental caries, pulpal diseases and periapical diseases	Clinical assessment, observation	CC



U07	F.U13.	To use and perform the current documentation of the patient, referral for investigations or specialist medical and dental consultation	Clinical assessment, observation	CC
K01	K01	To cooperate in the group of professionals, in the environment multicultural and multinational	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u> - observation of student's work - discussion during classes - opinions of colleagues	SE, CC
K02	K02	To create rules of the professional comradeship and the cooperation with representatives of other health care professionals	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u> - observation of student's work - discussion during classes - opinions of colleagues	CC
K03	K03	To participate actively in oral health promotion	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u> - observation of student's work - discussion during classes - opinions of colleagues	SE, CC

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:

Knowledge: 5

Skills: 5

Social competences: 4



Student's amount of work (balance of ECTS points)			
Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)		Summer apprenticeship (h)
	Winter	Summer	
1. Contact hours:	40,5	81	15
2. Online learning hours (e-learning):	40,5		
3. Student's own work (self-study):	24	24	0
Total student's workload	105	105	15
ECTS points for module/course	3,5	3,5	0,5
Comments			
Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)			
<p>Lectures</p> <p>Semester 7</p> <p>Lecture 1</p> <ol style="list-style-type: none"> 1. Communication with a patient of developmental age (verbal and non-verbal; doctor-parent-child triad) 2. Methods of adapting a child to dental treatment: behavioural, non-pharmacological, communication techniques (presence vs. absence of parents), protective (stabilization and immobilization) and pharmacological techniques (sedation, general anesthesia) 3. Child's behaviour in the dental office in terms of individual development, factors influencing behaviour - dental anxiety of mother and child, classification of child's behaviour in a dental office <p>Lecture 2</p> <ol style="list-style-type: none"> 1. Development of deciduous and permanent teeth (phases and time of eruption; resorption of deciduous teeth, mechanism of eruption, periods of eruption; phases of root development (apexogenesis). Eruption disorders (local, general, site and time of eruption) 2. Anatomy and histology of deciduous teeth and immature permanent teeth (differences in the structure of deciduous and permanent teeth, therapeutic aspect) <p>Lecture 3</p> <ol style="list-style-type: none"> 1. Caries of primary teeth - early childhood caries (ECC), epidemiology, definition, classification, main etiological factors; caries risk assessment) 2. Preventive management, specifics of cavity preparation, materials for deciduous teeth restoration, reconstruction of anterior and posterior deciduous teeth, factors determining the choice of restorative material in terms of the advancement of the carious lesion and patient's age, atraumatic restorative treatment (ART technique, IRT). 3. Recommendations for the child and parents, consequences of untreated caries 4. Caries in immature permanent teeth; factors determining the development of caries on the occlusal surfaces of permanent teeth, diagnosis, assessment of the advancement of carious changes in terms of the choice of therapeutic treatment 5. Protection against caries of erupting first molars; sealing pits and fissures - indications and contraindications, choice of material. Minimally invasive treatment: preventive restoration - PRR type 1 (extended sealing) and type 2 (preventive restoration), cavity preparation, restoration materials; selection of the cavity preparation method and restorative material in terms of the advancement of the lesion <p>Lecture 4</p> <ol style="list-style-type: none"> 1. The child's first visit to the dentist's office, time and course of the visit 2. Pro-health education of a pregnant woman. 3. Motivation to pro-health attitudes of mother and child <p>Lecture 5</p>			



1. Caries prevention in children: (primary primary, primary, secondary, tertiary)
2. Transmission of cariogenic bacteria, infectivity windows. Reduction of level of bacteria in the oral cavity. Carcinogenicity of carbohydrates
3. Oral hygiene in children and adolescents - toothpastes, rinses – content, characteristics, types, brushes and indications, techniques of brushing, hygiene of tongue, cleaning of interdental spaces, control of brushing efficiency
4. Fluoride prophylaxis – professional and at home

Seminars

Semester 8

No	Seminars topics
1	1. Pulp diseases of milk teeth: etiopathogenesis, symptomatology, classifications, diagnostics. treatment and Drugs and materials in endodontic treatment of milk teeth. Complications during and after treatment, prognosis.
2	2. Pulp diseases of immature permanent teeth: etiopathogenesis, symptomatology, classifications, diagnostics, treatment and prognosis Drugs and materials used in endodontic treatment Complications during and after treatment Apexification and apexogenesis
3	3. Traumatic dental injuries: etiology, epidemiology, classification of dental trauma, interview, clinical examination, radiological examination. 2. Rules of conduct in traumatic injuries.
4	4. Post-traumatic injuries of primary teeth: frequency, causes, symptoms, diagnostics, therapeutic procedures, prognosis, control visits schedule, complications; impact of injuries on permanent tooth buds. Schedule of follow-up visits. Prevention of traumatic tooth injuries.
5	5. Injuries of permanent teeth - frequency, causes, symptoms, examination, therapeutic procedure, prognosis, post-traumatic complications; presentation of therapeutic management of clinical cases. Prevention of post-traumatic tooth injuries.
6	6. 1. Injury prevention, risk factors and groups (standard and individual splints) 2. Differentiation of accidental and intentional injuries (abused child), management of suspected child abuse 2. Autotransplantation - selection of patient and tooth, prognosis progression. 3. Radiology regarding post-traumatic injuries.
7	7. Periodontal and gingival disease in developmental age, clinical examination, periodontal and hygiene assessment (indicators: BPE - basic periodontal examination, GI-gingival index, PII - plaque index, Api - approximated index, GOI - gingival overgrowth index, additional radiological tests), therapeutic treatment, prognosis.

Practical classes

Semester 7

Class No	Topic of practical classes
1	I. Communication with a patient of developmental age (verbal and non-verbal; doctor-parent-child triad) Methods of adapting a child to dental treatment: behavioural, non-pharmacological, communication techniques (presence vs. absence of parents), protective (stabilization and immobilization) and pharmacological techniques (sedation, general anesthesia) Child's behaviour in the dental office in terms of individual development, factors influencing behaviour - dental anxiety of mother and child, classification of child's behaviour in a dental office Discussion of the patient's card with particular emphasis on oral cavity indicators.
2	II. 1. Development of deciduous and permanent teeth (phases and time of eruption; resorption of deciduous teeth, mechanism of eruption, periods of eruption; phases of root development (apexogenesis) 2. Eruption



	disorders (local, general, site and time of eruption) 3. Anatomy and histology of deciduous teeth and immature permanent teeth (differences in the structure of deciduous and permanent teeth, therapeutic aspect)
3	Credit test - topic I and II III. Caries of primary teeth - early childhood caries (ECC), epidemiology, definition, classification, main etiological factors; caries risk assessment Treatment of caries, specifics of cavity preparation, materials for deciduous teeth restoration, reconstruction of anterior and posterior deciduous teeth, factors determining the choice of restorative material in terms of the advancement of the carious lesion and patient's age, atraumatic restorative treatment (ART technique).
4	IV. Caries in immature permanent teeth; factors determining the development of caries on the occlusal surfaces of permanent teeth, diagnosis, assessment of the advancement of carious changes in terms of the choice of therapeutic treatment Protection against caries of erupting first molars; sealing pits and fissures - indications and contraindications, choice of material. Minimally invasive treatment: preventive restoration - PRR type 1 (extended sealing) and type 2 (preventive restoration), cavity preparation, restoration materials; selection of the cavity preparation method and restorative material in terms of the advancement of the lesion
5	Credit test: topic III and IV V. The child's first visit to the dentist's office, time and course of the visit Pro-health education of a pregnant woman. Motivation to pro-health attitudes of mother and child VI. Caries prevention in children: (primary primary, primary, secondary, tertiary) Transmission of cariogenic bacteria, infectivity windows. Carcinogenicity: carbohydrates
No.	Topics of online classes
1	VII. Oral hygiene in children and adolescents - toothpastes, rinses, brushes, auxiliaries
2	VIII. Caries risk assessment, definition, estimation methods (CAMBRA, CRA, Cariogram), oral hygiene indicators, examination of the parameters of saliva with the help of tests
3	Credit test – topic V and VIII
4	IX. The importance of fluoride in caries prophylaxis: cariostatic mechanisms of fluoride action, methods of fluoridation, fluoride compounds used. Fluoride toxicology: toxic doses, fluorosis, safety of fluoride compounds
5	X. Non-fluoride prevention methods of dental caries (arginine, probiotics, calcium-sodium phosphosilicate, complex of phosphopeptide caseinate and amorphous phosphate calcium, xylitol, chlorhexidine)
6	Credit test: IX and X
7	Credit test of semester 7: topics I – X

Semester 8

No	Topics of practical classes
1	I. Pulp diseases of milk teeth: etiopathogenesis, symptomatology, classifications, diagnostics. treatment and Drugs and materials in endodontic treatment of milk teeth. Complications during and after treatment, prognosis.
2	II. Treatment - drugs and materials used in endodontic treatment of milk teeth. Complications during and after treatment, prognosis.
3	III. Pulp diseases of immature permanent teeth: etiopathogenesis, symptomatology, classifications, diagnostics, treatment and prognosis Drugs and materials used in endodontic treatment Complications during and after treatment



4	IV. Treatment - medicines and materials used in endodontic treatment Complications during and after treatment Apexification and apexogenesis
5	Crediting essay from topics: I-IV Conservative dental treatment of the patients.
6	V. Traumatic dental injuries: etiology, epidemiology, classification of dental trauma, interview, clinical examination of the patient after extraoral and intraoral injury, radiological examination. 2. Rules of conduct in traumatic injuries.
7	VI. Injuries of milk teeth: types of damage, clinical and radiological examination, therapeutic procedure in particular types of damage, prognosis, follow-up visits.
8	VII. Injuries of permanent immature teeth: types of damage, clinical and radiological examination, therapeutic procedure in particular types of damage, prognosis, follow-up visits.
9	VIII. 1. Consequences of post-traumatic injury 2. Prevention of traumatic teeth injury
10	Crediting essay from topics: V-VIII
11	XI. Periodontal and gingival disease in developmental age, clinical examination, periodontal and hygiene assessment (indicators: BPE - basic periodontal examination, GI-gingival index, PII - plaque index, API - approximated index, GOI - gingival overgrowth index, additional radiological tests) , therapeutic treatment, prognosis.
12	Crediting essay from topic IX- TEST
13	X. Dental radiology in pediatric dentistry: general information, types of X-rays used in the diagnosis and treatment of children, radiological interpretation of X-rays in developmental age. Radiological image at various stages of masticatory organ development Principles of radiological protection in the developmental age.
14	Crediting essay from topic X- TEST
15	Final test from 8th semester

Other

Basic literature (list according to importance, no more than 3 items)

1. Cameron AC, Widmer RP: Handbook of paediatric dentistry. 4th ed. Mosby, St Louis 2013
2. Koch G, Poulsen S: Paediatric dentistry - a clinical approach. Blackwell Munksgaard, 2009.
3. Welbury RR, Duggal MS, Hosey M-T: Paediatric dentistry. Oxford: Oxford University Press, 2005.

Additional literature and other materials (no more than 3 items)

1. Andreasen JO, Bakjland LK, Flores MT, Andreasen FM, Andreasen L: Traumatic dental injures. A manual. 2011
2. Scully C, Welbury R: Color Atlas of Oral Diseases in Children and Adolescents. Wolfe Publishing, 2001
3. McDonald RE, Avery DR, Dean JA: Dentistry for the Child and Adolescent, Elsevier 2011

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

multimedia projector, intraoral camera, local internet network, models

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

Student is admitted to 4th year classes after successful completion of the final test summarizing knowledge of the subject from the 3rd year, held at the end of the 6th semester.

Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades)

Conditions for passing the course Paediatric dentistry and Dental Prophylaxis - 4th year

1. Seminars:

- attendance at all seminars is obligatory,



- students participate in seminars in groups designated by the Dean's Office, i.e. they do not change seminar groups,
- in the event of absence or lack of preparation, the student is graded by their tutor
- the knowledge acquired at seminars is checked at a given seminar and graded

2. Classes:

- attendance at all classes is mandatory, three late arrivals (over 45 minutes in total) are considered as 1 absence
- it is allowed to make up one class per semester with another group after obtaining a written consent of your assistant.
- it is the student's responsibility to prepare the subject of the scheduled class and this is a condition for admission to practical classes (passing before each exercise), unprepared student is only allowed to assist

3. Lectures:

- attendance at all lectures is obligatory
- the knowledge acquired during the lectures is checked and assessed during exercises.

4. Mandatory procedures:

- I - restoration of 15 cavities in primary and immature permanent teeth:
 - One surface- 8
 - 2 surfaces - 4
 - 3 and more surfaces – 3
- II - Endodontic treatment of 3 teeth (4 canals) primary and immature permanent teeth
- III - medical history of each new patient
- IV - interpretation of at least 2 radiographs
- V - hygienic and dietary instruction for each first-time patient
- VI - control of preventive recommendations

5. Semester credit: credit test, partial tests, obligatory practical procedures.

6. Final exam: after X semester

*It is obligatory to use dental clothes, dental mask and dental gloves !
The use of cellular phones during whole clinical class or seminar is strictly.*

DIPLOMA EXAM REGULATIONS

The final examination after the 10th semester of 5th year consists of two parts: practical and theoretical. Both parts of the exam are treated synonymously, i.e. the exam must be awarded at least a satisfactory grade for each part of the examination, and admission to the second part of the examination is conditioned by the first part.

1. Practical – clinical interview, clinical examination, diagnosis, treatment planning, preventive recommendations, performing the clinical procedure.

2. Theoretical - test consist of 100 questions. Conditions for passing: 70 % of correct answers

Grade:	Criteria (only for courses/modules ending with an examination)
Very Good (5.0)	achievement of learning outcomes covering all relevant aspects
Good Plus (4.5)	achievement of learning outcomes covering all relevant aspects with some errors or inaccuracies
Good (4.0)	achievement of intended learning outcomes, with omitting some of the less important aspects
Satisfactory Plus (3.5)	achievement of intended learning outcomes, with omitting some important aspects or significant inaccuracies
Satisfactory (3.0)	achievement of intended learning outcomes, with omitting some important aspects or serious inaccuracies
	Criteria (only for courses/modules ending with e credit)
Credit	



Grade:	Criteria (examination evaluation criteria)
Very Good (5.0)	achievement of learning outcomes covering all relevant aspects
Good Plus (4.5)	achievement of learning outcomes covering all relevant aspects with some errors or inaccuracies
Good (4.0)	achievement of intended learning outcomes, with omitting some of the less important aspects
Satisfactory Plus (3.5)	achievement of intended learning outcomes, with omitting some important aspects or significant inaccuracies
Satisfactory (3.0)	achievement of intended learning outcomes, with omitting some important aspects or serious inaccuracies
Unit realizing the subject	Department of Pediatric Dentistry, Medical University of Wrocław
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Person responsible for module	Prof. Maciej Dobrzyński, DDS, PhD
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List of persons conducting specific classes				
Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Prof. Urszula Kaczmarek	Prof,DDS,PhD	Dentistry	dentist	lectures
M. Kowalczyk Zając	DDS, PhD	Dentistry	dentist	classes
D. Piesiak-Pańczyszyn	DDS	Dentistry	dentist	classes
M. Berdzik-Janecka	DDS	Dentistry	dentist	classes, lecture
M. Gutbier	DDS	Dentistry	dentist	classes
A. Urbańska	DDS	Dentistry	dentist	lecture



Date of Syllabus development

16.09.2020

Syllabus developed by

Agnieszka Czajczyńska-Waszkiewicz, DDS

Signature of Head of teaching unit

Prof. Maciej Dobrzyński, DDS, PhD

Signature of Faculty Dean

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